Work Order ID 100502 Page 1 April-22-13 1:42:36 PM Item ID: 646.3314 Accept *N900040100* Setup Start **Revision ID:** Stop Item Name: Blade *10* Start Qty: 10.00 **Start Date:** 4/22/13 **Cust Item ID:** Req'd Qty: 10.00 Required Date: 4/22/13 **Customer:** Reference: Run Process Plan: Date: 13-04-15 Tooling: Date: Approvals: Stop Date: SPC (Y/N): Date: Tool ID Tool # Plan Accept Reject Reject Insp. Sequence ID/ Operation Set Up/ Qty Code Qty Number Stamp Work Center ID Description **Run Hours Draw Nbr Revision Nbr** N/C 646.3300 0.00 100 S\$13-04-26 10 e BAND SAW *100* 0.00 Bandsaw Memo Cut Blank at 5.050" Jeaspa Bandsaw 0.00

100502(10)

HAAS I

HAAS CNC vertical machine #1

VERTICAL MACHINING #1

Memo

0.00

1-Machine per folio FB147 DWG REV: N/C FOLIO REV: AA

2- deburr and break all sharp edges except otherwise noted

DAG 25/3-4-2

| NCR: | Yes | 1 | . No |
|------|-----|---|------|
| NCK: | res | 1 | · NO |

| NCR: Ye | es / No | | | | WORK ORDER NON-O | CONF | ORN | IANCE / UPI | DATE | | | |
|---------------|------------|------------|------------|--------|----------------------------|--------|---------|------------------|-----------|---------------|---------------|--------------------|
| | | | | | | | | | | QA Closed: | Date: | |
| Work Ordei | ř: | | | | DISPOSITION | | | | AGAINST D | EPARTMENT, | /PROCESS | |
| | | | | | Rework |] | | Skid-tube | Crosstube | | Water Jet | Engineering |
| Part No | 0 | | | | Scrap | 11 | | 1achining | Small Fab | | d. Eng. Coor. | Quality |
| | | | | | Use-as-is | TI | | oforming | Finishing | Rec/Sto | re/Packaging | Other |
| NCR No | o | | ······ | | Work Order Update | J | ι | _arge Fab | Composite | _ | Supplier | |
| Root | | | | Descri | ption of work order update | Initi | ial | Act | tion | Sign & | | |
| Cause | Date | Step | Qty | (| or Non-conformance | Chief | Eng | Descr | ription | Date | Verification | QC Inspector |
| Doc/Data | | | | | | | | | | | | |
| Equip/Tooling | | 1 | | | | | | | | | | |
| Operator | _ | | | | | , | | | | | | |
| Material | _ | | | | | | | | | | | |
| Setup | _ | | | | | | | | | | | |
| Other | | | | | | | | | | | | |
| Process | _ | | | | | | | | | | | |
| Supplier | _ | | | | | | } | | | | | |
| Fraining | | | | | | | | | | : | | |
| Jnapproved | | <u> </u> | | | | 1 | | | | | | |
| | | | | | F. | AULT C | ATEG | ORY | | | | |
| Landing | g Gear | | | | General | | | | _ | _ | | _ |
| _ | Bending | | | | Bend | Gra | ain | | | Ovalized | | Pressure/Forced |
| L | Centre No | ot Concer | ntric to (| D/S | BOM/Route | Har | rdwar | e | | Over/Under | tolerance | Temperature/Cure |
| | Cracks | | | | Broken/Damaged | Ins | pectio | n Incomplete | L | Part Incorred | t | Weld |
| L | Crushed/ | Crimped | | | Burrs | Inst | tructio | ons Incomplete/l | Jnclear | Part Lost/Mi | ssing | Wrong Stock Pulled |
| | Cuffs | | | | Contamination | Ма | ainter | nance | | Part Moved | | |
| | Heat Trea | ıt | | | Countersink | Mis | slabele | ed | | Positioned V | /rong | _ i |
| | Inspection | n Strip in | Tube | | Cut Too Short | Mis | sread | , | | Power Loss/ | Surge | Other |
| | Ripples in | Bend | | | Drill Holes | Off | fset | | _ | | | |
| Γ | Torque W | aves in E | xtrusion | ı [| Drawing | Out | t of Ca | alibration | | | | |
| | Turning S | equence | | | Finish | Out | t of Se | equence | | | | |
| Γ | Wave/Tw | ist in Tuk | oe . | | Folio | Out | tside (| Dimensions | | | | |

DQA:

Date:

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| Work O | rder ID | 100502 |
|-------------|------------|--------|
| April-22-13 | 1:42:36 PN | 1 |

400500

Page 2

| pril-22-13 1:42:36 PM | ,050 <u>2</u> | | | | ハロノ゛ | | | | | | rage z |
|---|--|------------|--------------|------------------------------|--------------------------|------------|--------------|---------------|--------------------|----------|--|
| tem ID: 646.3314 Revision ID: tem Name: Blade | | | | Accept | *N900 | 040 | 100 |)* s | etup Start Stop | 1/1/2 | - - |
| Start Date: 4/22/13 Required Date: 4/22/13 Reference: | Start Qty: 10.00 Req'd Qty: 10.00 | | *10* *10* | | Cust Item I Customer: | D: | | | | | |
| •• | | | | | | ate: | | R | un Start Stop | "INH | ?1* ?2* |
| Sequence ID/ Work Center ID 20 *170* QC Quality Control | Operation Description QC2- Inspect parts off mack | hine FAI/F | FAIB | Set Up/ Run Hours 0.00 | Tool ID | Tool # | Plan Code | Accept Qty | Reject Qty | Number S | nsp. Stamp (A.S.) 25 82 /3-3 |
| 130 * 130* QC Quality Control | QC8- Inspect parts - second Memo | i check | · | 0.00 | 3.5.9 | ς. | | 10 | | | 04 04 9-69 |
| *140 *140 *Outsource Process - Heat Treat | Outsource process - Heat T Memo HEAT TREAT ISSUE P/O: | Γ AS PER | <i>a</i> - | 0.00 0.00 OTE #3 | | | | CZ | 1 <u>13/</u> 0 | 05/06 | 10 |

| | | | | | | | | | | | | DQA: | | Date: | |
|---|------|-----------------------------------|------|----------|--------|---|-----|----------|--|---|---------|---|---|-------|---|
| NCR: | Yes | / No | | | | WORK ORDER NON- | CO | NFOR | MANCE / UPD | DATE | | | | | |
| | | | | | | | | | | | (| QA Closed: | | Date: | |
| Work Orde | er. | | | | | DISPOSITION | | | | AGAINST D | EΡ | ARTMENT | PROCESS | | |
| Part I | No. | | | | | Rework Scrap Use-as-is Work Order Update | | Thern | Skid-tube Machining noforming Large Fab | Crosstube Small Fab Finishing Composite | | | Water Je d. Eng. Coo re/Packagin Supplie | r. | Engineering Quality Other |
| Root | | | | | Descri | iption of work order update | | Initial | Acti | on | | Sign & | | | |
| Cause | | Date | Step | Qty | | or Non-conformance | Ct | nief Eng | Descri | ption | \perp | Date | Verificati | ion | QC Inspector |
| Doc/Data Equip/Tooling Operator Material Setup Other Process Supplier Training Unapproved | | | | | | | | | | • | | | | | |
| | | | | | | | AUI | LT CATE | GORY | | | | | | |
| Landi | ng (| Bending Centre No Cracks Crushed/ | | ntric to | o/s | General Bend BOM/Route Broken/Damaged Burrs | | -1 | re on Incomplete ions Incomplete/U | nclear | | Ovalized Over/Under Part Incorrec | t | | Pressure/Forced Temperature/Cure Weld Wrong Stock Pulled |
| | | Cuffs | | | | Contamination | | Mainte | nance | | ٦ | Part Moved | | | • |

Mislabeled

Out of Calibration

Out of Sequence

Outside Dimensions

Misread

Offset

Positioned Wrong

Power Loss/Surge

Other

Turning Sequence

Wave/Twist in Tube

Ripples in Bend

Heat Treat

Inspection Strip in Tube

Torque Waves in Extrusion

Countersink

Cut Too Short

Drill Holes

Drawing

Finish

Folio

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160

Spray Painting per QSI005 4.2

0.00

160 SprayPaint

Memo

0.00

Spray Painting

PRIME AS PER DWG, SEE NOTE #4

PRIMER BATCH: \25452

10 Ø Ø A

| | | | | | | | | | | DQA. | Date. | |
|---------------|---------|--------------|----------|--------|---|-----|-----------|--|---|---------------|---|---------------------------|
| NCR: Y | es / No | ı | | | WORK ORDER NON- | CO | NFORM | MANCE / UPD | ATE | | | • |
| | | | | | | | | | | QA Closed: | Date: | |
| Work Orde | er: | | | | DISPOSITION | | | • | AGAINST DE | PARTMENT | /PROCESS | |
| Part N | lo | | | | Rework Scrap Use-as-is Work Order Update | | Therm | Skid-tube Machining noforming Large Fab | Crosstube Small Fab Finishing Composite | 4 | Water Jet d. Eng. Coor. re/Packaging Supplier | Engineering Quality Other |
| Root | | | | Descri | ption of work order update | T | Initial | Actio | n | Sign & | | |
| Cause | Date | Step | Qty | (| or Non-conformance | Cł | nief Eng | Descrip | otion | Date | Verification | QC Inspector |
| Doc/Data | | | | | • | T | | | | | | |
| Equip/Tooling | | | | | | | | | | | | |
| Operator | | | | | | | | | | | | |
| Material | | | | | | | | | | | | |
| Setup | | | | | | - | | | | , | | |
| Other | | ļ. | | | | 1 | | | | <u> </u> | | |
| Process | | | | | | - | | | | | | |
| Supplier | | | : | | | | | | | | | |
| Training | | | İ | | | | | | , | : | | |
| Unapproved | | | } | | | | | | | | | |
| | | | | | | AUI | LT CATE | GORY | | | | |
| Landi | ng Gear | | | | General | | | | | • | | _ |
| | Bendin | 3 | | | Bend | | Grain | | | Ovalized | - | Pressure/Forced |
| | Centre | Not Conce | ntric to | o/s | BOM/Route | | Hardwa | re | | Over/Under | tolerance | Temperature/Cure |
| | Cracks | | | | Broken/Damaged | | Inspecti | on Incomplete | | Part Incorred | ct | Weld |
| | Crushe | d/Crimped | | | Burrs | | Instructi | ions Incomplete/Un | clear | Part Lost/Mi | ssing | Wrong Stock Pulled |
| | Cuffs | | | | Contamination | | Mainte | | | Part Moved | | |
| | Heat Tr | eat | | | Countersink | | Mislabe | led | | Positioned V | Vrong | |
| ŕ | Inspect | ion Strip in | 1 Tube | , | Cut Too Short | | Misread | | | Power Loss/: | Surge | Other |

Offset

Out of Calibration

Out of Sequence

Outside Dimensions

Turning Sequence

Wave/Twist in Tube

Ripples in Bend

Torque Waves in Extrusion

Drill Holes

Drawing

Finish

Folio

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

| Work Orde | | 0502 | | | * | 100 | 502* | | | | ~ · | | Page 4 |
|--|--------------------|--|-------------|------------|-----------------|--------------------------|--------------------------|-------|--------------|---------------|---------------|------------------|--------------|
| Revision ID: | 646.3314 Blade | | | A | Accept | | *N900 | ი4ი | 100 |)* 5 | Setup Sta | 1 \ | IS1* IS2* |
| Required Date: | 4/22/13 4/22/13 | Start Qty: 10.00 Req'd Qty: 10.00 | | 10* 10* | | | Cust Item I Customer: | D: | | | | : | |
| Approvals: | | an: | Date: | | Tooling SPC (Y/ | | | ate: | - | Ī | | art *N | IR1* IR2* |
| Sequence ID/ Work Center II 170 *170* QC Quality Control | | Operation Description QC14- Inspect Spray Paint Memo | , | | | p/ Hours NAS 16 | Tool ID 13/64/05 | Tool# | Plan Code | Accept Qty | Reject Qty | Reject Number | Insp. |
| 180 *180* Packaging | | Identify as per dwg & Stoc | k Location: | ST536 | 0.00 | | | | | 10x | | M.D. | 16-06-6 |

Packaging

IDENTIFY AS PER APICAL MPP-120 BY STAMPING P# AND REV

190

190

Memo

QC21- Final Inspection - Work Order Release

Quality Control

0.00

0.00

136/109) 113-064

| | | | | | | | | | | | DQA | x: Date | e: |
|---------------|------------|-----------|---------------------|----------|--------|--|-----|------------|---|---|-------------|--|---------------------------|
| NCR: | Yes | / No | | | | WORK ORDER NON-O | COI | NFORM | √ANCE / UP | PDATE | QA Close | d: Date | 2: |
| Work Orde | er. | | ·· ··· • | | | DISPOSITION | | | | AGAINST DI | | • | , |
| Part I | - . No. | | | | | Rework Scrap Use-as-is Work Order Update | | t Therm | Skid-tube Machining noforming Large Fab | Crosstube Small Fab Finishing Composite | -1 | Water Jet od. Eng. Coor. ore/Packaging Supplier | Engineering Quality Other |
| NCKI | ١٠٠. | | | | | work Order Opuate | J | | raige rab | Composite | 1 | Jupplier | |
| Root | | | | | Descri | ption of work order update | | Initial | Ar | ction | Sign & | | |
| Cause | \Box | Date | Step | Qty | (| or Non-conformance | Ct | nief Eng | Desc | cription | Date | Verification | QC Inspector |
| Doc/Data | | | | | | | | | | | | 1 | |
| Equip/Tooling | Ш | | | | | | | | | | | - | |
| Operator | Ш | | ļ | | | | | | | | | | |
| Material | | | | | | | | | | | | | |
| Setup | Ш | | | | | | İ | | | | | | |
| Other | | | 1 | ŀ | | | | | | | | | |
| Process | Ш | | | | | | i | | | | | | |
| Supplier | | | | | | | ļ | | | • | | | |
| Training | | | 1 | | | | | | | | | | |
| Unapproved | | | | | | | | | | | | | |
| | | ٠ | | | | F | AUI | T CATE | GORY | | | | |
| Landi | ng G | ear | | | | General | | _ | | | _ | _ | |
| | | Bending | | | | Bend | | Grain | | | Ovalized | L | Pressure/Forced |
| | | Centre No | ot Conce | ntric to | o/s | BOM/Route | | Hardwa | re | | Over/Unde | er tolerance | Temperature/Cure |
| | | Cracks | | | | Broken/Damaged | | Inspecti | on Incomplete | | Part Incorr | ect | Weld |
| | | Crushed/ | Crimped | | | Burrs | | Instruct | ions Incomplete | /Unclear | Part Lost/i | Missing [| Wrong Stock Pulled |
| | П | Cuffs | | | , | Contamination | Г | Mainte | nance | | Part Move | | |
| | П | Heat Trea | it | | | Countersink | Г | Mislabe | led | | Positioned | Wrong | |

Misread

Out of Calibration

Out of Sequence

Outside Dimensions

Offset

Other

Power Loss/Surge

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

Ripples in Bend

Turning Sequence

Wave/Twist in Tube

Inspection Strip in Tube

Torque Waves in Extrusion

Cut Too Short

Drill Holes

Drawing

Finish

Folio

Page 1

Work Order ID:

100502

Parent Item:

646.3314

Parent Item Name:

Blade

Start Date: 4/22/13

Required Date: 4/22/13

Start Qty: 10.00

Required Qty: 10.00

Comments:

IPP REV:A NEW ISSUE 12/11/07 JFS VERIFY BY: JLM

| Component Item ID/ Item Name | Replacement Item ID | Mfg/ Purch | Bin Item | Primary Location | Last Location | Route Seq ID | Unit of Measure | Qty on Hand | Qty per Kit | Total Qty | Qty Da Issued Iss | nte Status sued |
|---|------------------------|---------------|-------------|---------------------|------------------|-----------------|-----------------|----------------|-------------------|-------------------|----------------------|--------------------|
| MSTEEL-A2- B0.500X1.250 AISI A2 TOOL STEEL BA | .R. 0.500 X 1.250 | Purchased | No | | | 100 | f | 114.3500 | 0.421 4 | 4.4315789 300' | ff, | 3-04-26 |

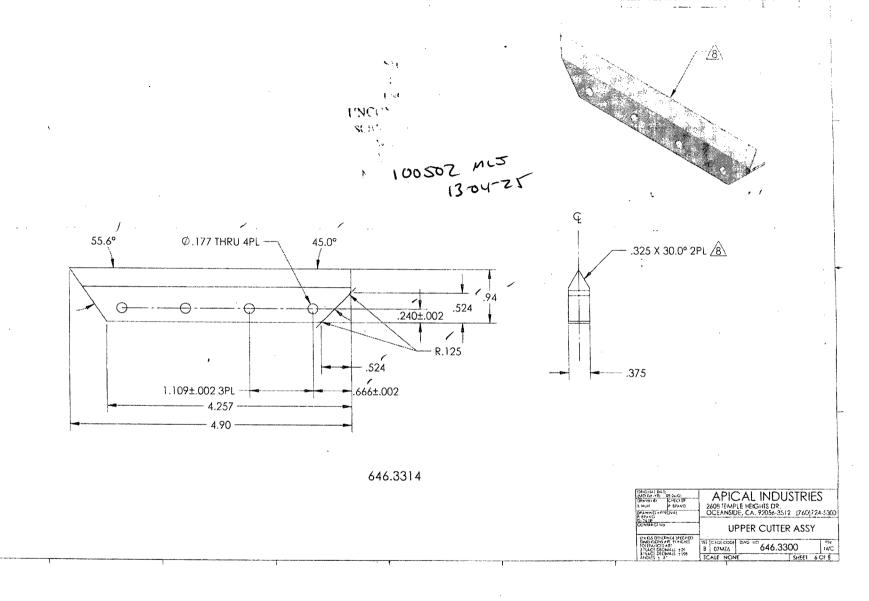
| <u>Location</u> | Loc Qty | Loc Code | |
|-----------------|-------------|----------|---------------------|
| MAT009 | 114.3500001 | | Same Marrie College |
| 123250 | 0.0000001 | • | |
| [125350] | 114.35 | | 4.3001 |

| | | | | | | | | | | DQA: | Date: | s (# 5 |
|------------------------------|-----------|------|--------------|-----|--------|--|-----------|--|--|------------|--|---------------------------|
| NCR: Y | es | / No | | | - | WORK ORDER NON-C | CONFORI | MANCE / UP | DATE | QA Closed: | Date: | |
| Work Orde Part N NCR N | - - lo | | | | | DISPOSITION Rework Scrap Use-as-is Work Order Update | i | Skid-tube Machining moforming Large Fab | AGAINST DE Crosstube Small Fab Finishing Composite | Pro | /PROCESS Water Jet d. Eng. Coor. re/Packaging Supplier | Engineering Quality Other |
| Root | | : | | | Descri | ption of work order update | Initial | Ac | tion | Sign & | | |
| Cause | | Date | Step | Qty | | or Non-conformance | Chief Eng | Desc | ription | Date | Verification | QC Inspector |
| Doc/Data | | | | | | | | | | | | |
| Equip/Tooling | | | | | | | | | | | | |
| Operator | | | | | | | | | | | | |
| Material | | | | | | | | <i>*</i> | | | | |
| Setup | | | <u> </u> | | | | | | | | | |
| Other | | | | | | | | | | | | |
| Process | | | 1 | | | | | | | - | | |
| Supplier | | | | | | • | | | | | | |

Unapproved **FAULT CATEGORY Landing Gear** General Bend Grain Ovalized Pressure/Forced Bending BOM/Route Centre Not Concentric to O/S Hardware Over/Under tolerance Temperature/Cure Broken/Damaged Cracks Inspection Incomplete Part Incorrect Weld Crushed/Crimped Instructions Incomplete/Unclear Part Lost/Missing Wrong Stock Pulled Burrs Cuffs Part Moved Contamination Maintenance Heat Treat Countersink Mislabeled Positioned Wrong Inspection Strip in Tube Power Loss/Surge Other Cut Too Short Misread Drill Holes Ripples in Bend Offset Out of Calibration Torque Waves in Extrusion Drawing Turning Sequence Finish Out of Sequence Wave/Twist in Tube Folio Outside Dimensions

Training

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G



L

| DART AEROSPACE LTD | Work Order: | 00502 |
|-----------------------------------|--------------|-------------|
| Description: upper cutter | Part Number: | CH6-3314 |
| Inspection Dwg: 646-3300 Rev: N/C | | Page 1 of 1 |

FIRST ARTICLE INSPECTION CHECKLIST

| Drawing | Tolerance | Actual | Accept | Reject | Method of | Comments |
|-----------|------------|-----------|--------|---------|------------|----------|
| Dimension | | Dimension | лосор | reject | Inspection | Comments |
| 55.6° | + 5° | 55,6 | | | osalsactor | |
| 0-177 | 4-005/001 | 178 | | | Pin , | |
| 450 | + 50 | 450 | | | oxotractor | |
| -94 | +.010 | 937 | / | | VECK | JL-10 |
| .524 | ±-005 | -524 | | | | |
| 240 | +-002 | 240 | | | ~ | |
| R 125 | 005 | -125 | | | | |
| 524 | + 005 | .524 | | | Ų | |
| -666 | + 002 | -666 | | | H-G | |
| 4.90 | ±-010 | 4-895 | / | | NEW | JL-10 |
| 4-257 | 1-005 | 4257 | | | ٠. | |
| 1-109 | + -002 | 1.109 | | | ~ | |
| -325×30° | ±.005/±_5° | -325×3° | | | - | |
| -375. | 005 | -374 | | | ~ | |
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| | | | - DAS | | | |

| Measured by: | SL | Audited by: | 8-80 0-4 | Preliminary Approval: | |
|--------------|----------|-------------|-------------|-----------------------|--|
| Date: | 13-05-02 | Date: | 13.5.6 | Date: | |

| Rev | Date | Change | Revised by | Approved |
|-----|----------|----------------------------|------------|----------|
| E | 10.04.14 | Added preliminary approval | KJ | |

\$ 10.04.15



Dart Aerospace Ltd. 1270 Aberdeen Street Hawkesbury, ON K6A 1K7

Tel: 613 632 9577 Fax: 613 632 1053

PURCHASE ORDER

Purchase Order ID PO19799

Purchase Order Date 5/06/13 PO Print Date 5/06/13

Page Number 1 of 1

Order From:

VC-MET004

METCOR INC.

560 BOUL. ARTHUR SAUVE SAINT-EUSTACHE, QC J7R 5A8

CA

Contact Name

Vendor Phone

450 473 1884

Vendor Fax

450 491 5498

Vendor Account Nbr

Buyer

Chantal Lavoie

Requisition Nbr

Tax Resale Nbr

10127-2607

Terms Currency Net 30 CAD

FOB

Destination-Collect

Ship To:

DART AEROSPACE LTD

1270 ABERDEEN

HAWKESBURY, ON K6A 1K7

CANADA



| Line Nbr | Reference Revision ID Vendor Part Number | Description/ Mfg ID | Req Date/ Taxable Unit of | Req Qty/ Measure | Ship Method | Unit Price | Extended Price |
|----------|--|------------------------|--|---------------------|------------------|------------|-------------------|
| 1 100 | 0499 | 646.3315 BLADE | 5/17/13 Yes | 10.00 | FedEx PI collect | \$0.0000 | \$0.00 |
| | | Special lust: | FINISH: HEAT TREAT ROCKWELL HARDNES | TO 58-62 I | RC | | |
| | | | PART ARE MADE FRO | | | | |
| 2 100 | 0502 | 646.3314 BLADE | PLEASE NOTE: DETAIL 5X17/13 Yes | 10.00 | | \$0.0000 | \$0.00 |
| | | Special Inst: | FINISH: HEAT TREAT ROCKWELL HARDNES | TO 58-62 I SS | RC | | |
| | | | PART ARE MADE FRO | M AISI A2 | ? TOOL | | |

PO Total:

\$0.00



PLEASE NOTE: DETAIL C OC REQUIRED

No substitution or deviation without consent.

Certificate of Conformity or Material Certification required YES NO

Change Nbr:

Change Date: 5/06/13

METCOR INC.

560 BOUL. ARTHUR-SAUVÉ ST-EUSTACHE, QC J7R 5A8 Tel: 450-473-1884 / Fax: 450-491-5498

Reçu de livraison

Delivery Receipt

| BON DE TRAVAIL | EXPÉDITEUR | BON D'EXPÉDITION |
|----------------|------------|------------------|
| Order | Shipper ID | Shipper |
| 186158 | 1 | 71609 |

EXPÉDITION COMPLÈTE / Shipped Complete

CLIENT / Customer

2000

215

DART AEROSPACE 1270 ABERDEEN

HAWKESBURY, ON K6A 1K7

Ph: 613-632-5200 Fax: 613-632-1053 LIVRÉ À /Shipped To

DART AEROSPACE

1270 ABERDEEN

HAWKESBURY, ON K6A 1K7

Ph: 613-632-5200 Fax: 613-632-1053

| | | | Karangan Karangan Karangan Karangan Karangan Karangan Karangan Karangan Karangan Karangan Karangan Karangan Ka | | |
|---|---------------------------------------|---------------------------------------|--|--|-------------------------|
| COMMANDE DU CLIENT Customer PO | BON DE LIVRAISON D Customer Shipper | | TYPE DE MATÉRIEL Material Type | DATE DE LA COMMANDE Order Date | TRANSPORTEUR Carrier |
| PO19799 | | | A2 | 2013/5/7 | FEDEX |
| QUANTITÉ No. PIÈC Quantity Part No | | | DESCRIPTION DI Part Description | , | POIDS Weight |
| (10) 646 RÉF 10 MATERI | DE | STEEL | <u>, ja sõda saata kasas</u> aa | | 5 |
| YPE DE CONTENEUR Container Type BOITE DE CARTON | # DE CONT # Of Contai | TENEURS | | RES CONTENEUR | |
| OTTE DE OTTOIT | | | | | |
| CERTIFICAT | · · · · · · · · · · · · · · · · · · · | | | | |
| CERTIFICAT | | · · · · · · · · · · · · · · · · · · · | QUANTITÉ EXPÉDI | ÉE / Quantity Shipped : | 20 |
| EMPAQUETAGE | | | | ÉE / Quantity Shipped : :DIÉ / Weight Shipped : | |
| | * | 3 | POIDS EXPÉ | - | 20 5,00 |
| EMPAQUETAGE | | | POIDS EXPÉ | DIÉ / Weight Shipped : | 5,00 |
| EMPAQUETAGE Packing | | | POIDS EXPÉ | DIÉ / Weight Shipped : | 5,0 |
| | | | POIDS EXPÉ QUANTITÉ RESTANTI POIDS RESTAI | DIÉ / Weight Shipped : | 5,00 |

EXPÉDIÉ LE / Shipped On : 2013/05/16

Date:

F-050-06 Rev. B

Signature:



560, boul. Arthur-Sauve, St-Eustache (Quebec) J/ Tél. 450 473-1884 Télécopieur/Fax administration 450 491-5498 Télécopieur/Fax production 450 491-6454

Certificat de Conformité

Certificate of Compliance

| BON DE TRAVAIL | CHARGEMENT |
|-----------------------|------------|
| order | load |
| 186158 | 1 |
| L (| 1 |

1

CLIENT / customer 215
DART AEROSPACE
1270 ABERDEEN
HAWKESBURY

ON K8A 1K7

UVRÉ À / shipped to: DART AEROSPACE 1270 ABERDEEN HAWKESBURY

ON KBA 1K7

| COMMANDE DU CLIENT customer po | BON DE LIVRAISON DU CLIENT customer shipper no. | MATÉRIEL material | CODE DE TRAITEMENT mat'l heat code | NUMÉRO DE LOT lot number |
|---|--|----------------------|--|-----------------------------|
| PO 19799 | | . A2 | | |
| Street, and the street street is the street street in the street | | | hay managaran and a samula and a samula and a samula and a samula and a samula and a samula and a samula and a | |

<u>SPÉCIFICATIONS DU PROCÉDÉ</u>

processing specifications

VAC HARDEN

HARDEN AND TEMPER

EXIGENCE / requirement | SPÉCIFICATIONS / specifiedTESTS EXÉCUTÉS / performed | RÉSULTATS DE TESTS / results | HARDNESS | 58 - 62 HRC | 5 | 60.0 - 61.0 HRC

| | <u> </u> |
|---|-----------------------------|
| 5 | 848.3315 |
| | (10) BLADE |
| | REF: 100499 |
| | MATÉRIEL: AISLA2 TOOL STEEL |
| | |
| | (10) 648.3314 BLADE |
| | REF. 100502 |
| | MATERIAL AISI A2 TOOL STEEL |
| | |
| | CONTENANT: 180 TE DE CARTON |
| | |

COMMENTAIRES / comments

CERTIFIÉ par / Certified by:

DATE: 2013-05-16

METCOR INC. 560 BOUL. ARTHUR-SAUVÉ ST-EUSTACHE, QC, J7R 5A8

Tel: 450-473-1884 / Fax: 450-491-5498

Certificat de Conformité Détaillé

Detailed Certificate of Compliance

| BON DE TRAVAIL order | CHARGEMENT load |
|-------------------------|-----------------|
| 186158 | 1 |

CLIENT / customer 215
DART AEROSPACE
1270 ABERDEEN

HAWKESBURY

ON K6A 1K7

LIVRÉ À / shipped to: DART AEROSPACE 1270 ABERDEEN HAWKESBURY

ON K6A 1K7

| COMMANDE DU CLIENT customer po | BON DE LIVRAISON DU CLIENT customer shipper no. | MATÉRIEL material | CODE DE TRAITEMENT | NUMÉRO DE LOT lot number |
|--------------------------------|--|----------------------|--------------------|-----------------------------|
| PO19799 | | A2 | | |

SPÉCIFICATIONS DU PROCÉDÉ

processing specifications

VAC HARDEN

HARDEN AND TEMPER

EXIGENCE / requirement | SPÉCIFICATIONS / specified TESTS EXÉCUTÉS / performed | RÉSULTATS DE TESTS / results | HARDNESS | 58 - 62 | HRC | 5 | 60.0 - 61.0 | HRC

| QUANTITÉ quantity | POIDS weight | DESCRIPTION DES PIÈCES parts description |
|---|--|---|
| 20 | 5 | 646.3315 |
| | | (10) BLADE REF: 100499 MATÉRIEL: AISI A2 TOOL STEEL |
| ' | | (10) 646.3314 BLADE RÉF. 100502 MATERIAL AISI A2 TOOL STEEL |
| - 144 F. S. | to the same of the | CONTENANT: 1 BOÎTE DE CARTON |

| Operation | Temp. spécifiée Specified Temp | Temps de trempe Spécifié Specified Soak Temp | Atmosphere | Carbone Carbon Potential | Q-Media Q-Temp | Four # Furnace # | Date Départ Start Date | Heure d'entrée Time In | Heure de sortie Time Out | Date Complétée Date complete |
|---------------------|-----------------------------------|---|------------------|--------------------------------|-------------------|---------------------|---------------------------|---------------------------|-----------------------------|---------------------------------|
| 1.00 CONT. INIT. | LAVAGE | | si nécessaire | | | | | | | |
| 2.00 PREPARING | COMPTAGE | | | | | | | | | |
| 3.00 PREHEAT 1 | 1200 | 0:30 | VAC | | | 390 | | | | |
| 4.00 PREHEAT 2 | | 0:30 | VAC | | | 390 | | | | |
| 5.00 VAC HARDE | | 1 hrs 30 minutes | VAC | | AZOTE | 390 | | | | |
| 6.00 TEMPER | 400+/-10°F | 2 hrs | air | | | 653 | | | | |

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| BON DE TRAVAIL | CHARGEMENT |
|----------------|------------|
| order | load |
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LIVRÉ À / shipped to: DART AEROSPACE 1270 ABERDEEN HAWKESBURY

ON K6A 1K7

| Operation | Temp. spécifiée Specified Temp | Temps de trempe Spécifié Specified Soak Temp | Atmosphere | Carbone Carbon Potential | Q-Media Q-Temp | Four # Furnace # | | Heure d'entrée Time In | Heure de sortie Time Out | Date Complétée Date complete |
|--------------------|-----------------------------------|---|------------|--------------------------------|---------------------------------------|---------------------|------------|---------------------------|-----------------------------|---------------------------------|
| 7.00 TEMPER 2 | 400+/-10°F | 2 hrs | air | | · · · · · · · · · · · · · · · · · · · | 653 | | | | |
| 8.00 HARDN INS | | | | | | | | | | |
| 9.00 FINAL INSP | | | | | | | 05-16-2013 | | | 05-16-2013 |

COMMENTAIRES / comments

Le traitement thermique a été fait en utilisant des équipements en conformité avec la spécification demandée. Toutes les opérations de traitement thermique ont été faites en conformité avec les requis de la spécification demandée et toutes les vérifications et les tests demandées ont été faites et documentés.

Aucun changement ou dérogation n'a été faite par rapport au traitement thermique demandé.

On certifie que le matériel a été fabriqué, échantillonné, testé et inspecté en accord avec les spécifications du matériel et le bon de commande et le matériel rencontre les exigences spécifiés.

All the heat treatment processing performed on this order was accomplished using heat treatment equipment compliant with the requested heat treatment specification.

All the heat treatment operations were accomplished in accordance with the requested/required heat treatment specification and all required verifications test have been performed and documented.

No unauthorized changes or deviations to required heat treatment specifications or procedures have been performed. We certify that the material was manufactured, sampled, tested and inspected in accordance with the material specification and the purchase order and was found to meet the requirements.

| APPROUVÉ par / Approved by: | Jack Olen | DATE: 2013-05-16 |
|-----------------------------|-----------|------------------|
| | 12 | |

/ Nous certifions que toute l'information comprise sur ce rapport est exacte et conforme aux requis du client./We certify that all the information on this report is exact and in accordance with the order requirements.

F-000-20 REV.B